and no CH4 is present ; there is thus burnt out of the distillation gas
0-10 cubic metre II, which required 0-05
cubic metre 0 and yielded . . . nil cbm. OCX f•()•!<) cl>m. N and 0-34 cubic metre OII4, which required
0-68 cubic metre 0 and yielded . . 0-34 „ < •<>.. f li'5(> „ N
Thus originating products of combustion = (KM cbm. llOa+2'7«0 chin. N
Were the gas reviewed set right in respect to these burnt products and afterwards freed from distillation gas, there would result

Gas reviewed	00a 0-58+00 1-28+011^ O-OO+'II ()-f>0 + N «V72					
Products \ burnt	— 0-34	+	(KM +	<>•!<).....	2-7S	
reproduced) The original ") gas would have been ;	CO-2 0-24+CO l-28+OII< O-fri+H (HJO+N 2«<>7 nbm.					
Less distillation gas)	5	Q.04	().()9	().;M	().(}0	().0.(
Balance steam-air gas.	Q0a 0-20+00 1-19				+N 2-JW ohm.	

that is to say, the steam-air gas shows the same composition as in Example II., with the exception of 0'4(> cubic motru If, which ntfW is deficient, and increased nitrogen content corresponding thereto. There is thus in this case absolutely no II evidenced in the steam-air gas, although actually a considerable content thereof has been present. In order, however, to be in the position to judge whether actually no steam was decomposed, one must know the more detailed circumstances under which the production of steam-air gas ensued. It can be said in general that the hydrogen content of the ntoam-air gas found by this method is to be regarded as very unreliable. For explanation of this phenomenon, it Biiflices to allude to the peculiarities both of the production and also of the combustion of the steam-air gas. The unit of weight of carbon, requires for its gasification into CO a specified amount, x, of oxygen, but for its complete combustion the double amount, i.e. 2#. Were now the carbon first correctly gasified to CO, notwithstanding that a portion of the necessary oxygen were taken from steam, so must the amount of air